

MPE ESTIMATION

FCC ID: 2A5TQ-P700

1, According to §1.1310, Limit for General Population/ Uncontrolled Exposures

Frequency	Power density (mW/ cm ²)	Averaging time(minutes)
300MHz----1.5GHz	F/1500	30
1.5GHz---100GHz	1.0	30

Note: F= Frequency in MHz

2, Estimation Result

	Frequency (MHz)	Max PK Output power(dBm)	Tune Up Power(dBm)	Max Tune Up power(mW)	Antenna Gain(dBi)	Antenna Gain (numerical)	MPE (mW/cm ²)
BLE	2440	10.91	10±1(11)	12.589	-6.30	0.23	0.00059
5.8GWiFi	5755	7.39	7±1(8)	6.310	0.74	1.19	0.00149

$$Pd = \frac{P_{out} * G}{4\pi r^2}$$

Note:

Note: The estimation distance is 20cm

Note:

PK Output power= conducted power in mW.

G=power gain of the antenna in the direction of interest relative to an isotropic radiator

R=distance to the center of radiation of the antenna in cm

Conducted power see the test report **HK2505222657-1E/2E**, Bluetooth antenna gain=-6.30dBi, 5.8GWiFi antenna gain=0.74dBi

Simultaneously MPE

$$\text{Bluetooth} + \text{5.8GWiFi} = 0.00059 + 0.00149 = 0.00208$$

When the minimum test separation distance is >20 cm, a distance of 20 cm is applied to determine RF Exposure test exclusion. The test exclusion threshold is 0.00208 which is < 1.0, RF Exposure testing is not required.

-----The End-----